ABSTRACT

(Object) The present invention provides a novel phosphorescent compound by synthesizing an orthometallated complex by using easy-synthesized ligands. Further, the invention provides an electroluminescent device having high luminous efficiency by using the phosphorescent compound. Moreover, the invention provides a light-emitting device operating at a low voltage by using the electroluminescent device.

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(Solution Method) According to the invention, a phosphorescent compound represented by general formula [formula 1] is synthesized. Further, an electroluminescent device containing the phosphorescent compound is formed.

$$R_2$$
 N
 M - L [formula 1]
 R_3
 R_4

In order to generate phosphorescent emission further efficiently, a heavy metal is preferably used as a central metal from the perspective of heavy atom effects. Therefore, one feature of the present invention is that the central metal M in the foregoing general formula [formula 1] is iridium or platinum.